

**Appl. No. 09/675,533
Amdt. dated September 20, 2004
Reply to Office action of June 22, 2004**

REMARKS/ARGUMENTS

Applicant received the Office action dated June 22, 2004, in which the Examiner: (1) rejected claims 1-3, 8, 9 and 24 as being obvious over Olafsson (U.S. Patent No. 6,163,570), (2) rejected claim 26 as being anticipated by Olafsson, and (3) rejected claims 4-7, 25 and 27 as being obvious over Olafsson in view of Decker (U.S. Patent No. 4,757,495). Applicant amends claims 10 and 20. Based on the amendments and argument contained herein, Applicant respectfully submits that claims 1-27 are in condition for allowance.

Claim 1 requires, among other things, "sending a configuration packet from said receiving node to said transmission node including the preferred power level for communication." Olafsson does not teach or suggest this limitation. Instead, Olafsson is directed to "a pulse code modulation modem system that utilizes the same total average transmit power formula for designing signal point constellations and for verifying that the transmit power of signal point constellations are within a designated maximum power limit" (Abstract). Referring to Figure 2 of Olafsson, modems 202, 204 are shown coupled to each other. Signal point constellations are sent from modem 204 to modem 202. As long as the transmit power of these signal point constellations is less than a maximum power limit, for example, as set by the Federal Communication commission (FCC), then data transfer may be initiated. Abstract and col. 1, lines 41-47; col. 8, lines 1-10). Nowhere does Olafsson teach or suggest sending "a configuration packet" including a specific "preferred power level" at which communication is to take place. Instead, Olafsson teaches that any power level is acceptable as long as the power level falls below a maximum limit. At least for this reason, claim 1 and all claims depending from claim 1 are allowable over Olafsson.

One or more of the dependent claims that depend from claim 1 are patentable for one or more reasons in addition to the reasons stated above. For example, claim 3 requires "determining the average noise level on the transmission media of the network." Applicants do not find a teaching or a suggestion of this limitation in Olafsson. Claim 4 requires determining the average noise level on the transmission media, determining the signal level

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necessary at the receiving node given the average noise level and required signal-to-noise ratio, determining the amount of attenuation suffered by the training packet, and determining the proper transmit level by summing the signal level at the receiving node and the amount of the attenuation. This combination of limitations does not appear to be taught or suggested by Olafsson. Claim 5 depends on claim 4 and is patentable for at least the same reasons as claim 4. In addition, claim 5 requires "adding the average noise level to the signal-to-noise ratio to determine the signal level necessary at the receiving node." Again, this limitation does not appear to be suggested or taught by Olafsson. Claim 7 is also dependent on claim 4, and thus patentable for the same reasons as claim 4. Claim 7 also requires determining the average power level of the training packet and comparing the power level of the training packet to the predetermined power level of which the training packet was sent. This combination of limitations is not found in Olafsson. The preceding limitations noted with regard to claims 3-5 and 7, or similar limitations, can be found in one or more of the claims that depend from claim 10. Thus, the preceding arguments with respect to dependent claims 3-5 and 7 may apply to one or more of the claims that depend from claim 10.

Claim 9 depends from claim 1 and is patentable at least for the same reason as claim 1. Claim 9 also specifies that the "preferred power level" is the "minimum power level for reliable communications." For this limitation, the Examiner points to col. 6, lines 12-24 of Olafsson. This passage from Olafsson does not teach or even suggest a "minimum power level." Instead, the identified passage from Olafsson teaches that "If the transmit power of a constellation exceeds the power limit, then the modem system 200 may redesign the constellation such that its total average power is within an acceptable range." Col. 6, lines 24-27. As explained above, Olafsson is concerned with ensuring that the power level of the transmission does not exceed an upper limit. At least for this additional reason, claim 9 is patentable over Olafsson.

With regard to claims 10-19, which are system claims, the Examiner concludes that because "Olafsson and Decker together teach the claim method steps," "Olafsson and Decker together teach the apparatus to implement the

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claimed method steps." The Examiner does not identify any prior art structure that reads on any of the structural limitations in system claims 10-19. Even assuming that Olafsson and/or Decker teach the limitations of method claims 1-9 (which, as explained above, is not believed to be the case), it does not logically follow that Olafsson and Decker necessarily have the identical structural limitations of system claims 10-23. At any rate, Applicant respectfully requests the Examiner to identify where in the prior art the structural limitations of each of claims 10-23 can be found. Without this explanation by the Examiner, it is difficult for Applicant to formulate a response to the Examiner's rejections.

Applicant amends claim 10 to recite that the receiver control logic "transmits the preferred power level to the transmission node." As explained above, Olafsson, does not teach or suggest this limitation. Decker appears similarly deficient. At least for this reason, claim 10 and all claims that depend from claim 10 are patentable over Olafsson.

Claim 20 is a system claim. As with claim 10, the Examiner neglected to identify the structural limitations in any prior art reference for the claimed structural limitations. Applicant respectfully requests an identification of the structural limitations from the prior art that causes claim 20 to be unpatentable, to that extent that the Examiner in fact continues to believe claim 20 is unpatentable.

In addition, claim 20 requires "transmitter control logic" that causes "a training packet" to be sent to a receiving node and also requires a "configuration packet containing the preferred power level from the receiving node." As explained above, the art of record does not teach or suggest this limitation. At least for this reason claim 20 and all claims that depend from claim 20 are allowable over the art of record.

Method claim 24 requires "Sending a configuration packet from said receiving node to said transmission node including the determined minimum power level for communication." This claim is patentable for at least two reasons. First, none of the art of record teaches or suggests a receiving node sending a configuration packet to a transmission node with a target power level. Second, none of the art of record teaches a receiving node sending a "minimum power

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level" to a transmission mode." For either or both of these reasons, claim 24 and all claims that depend from 24 are allowable over the art of record.

In the course of the foregoing discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Respectfully submitted,



Jonathan M. Harris
PTO Reg. No. 44,144
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
ATTORNEY FOR APPLICANT

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400